Examiner rejected claim 6 under 35 U.S.C. § 102(b) as being anticipated by *Lobiondo* (USPN 5,287,194). The Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatenable over *Sugiura et al.* in view of *Rourke et al.* (USPN 5,398,289). And, the Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatenable over *Sugiura et al.* in view of *Nezu* (USPN 5,638,511).

In the action, the Examiner rejected claims 1, 3, 4, 15, and 16 under 35 U.S.C. § 102(e) as being anticipated by *Sugiura et al.* The Examiner maintains that *Sugiura et al.* discloses each element of Applicants' claims. Claim 1 of Applicants' invention claims "output result control means which . . . controls the processing request issued to the job execution section in such a way that a specified number of copies of the job are output using the information which specifies a job output method." While the Examiner points to figure 10c of *Sugiura et al.* as disclosing this element, the Applicants' can find no indication that this reference discloses or suggests that "a specified number of copies of the job are output."

The Examiner asserts in his advisory action that because one copy of the document is printed that one copy is a specified number. Applicants respectfully disagree with this assertion, but in order to further clarify the invention as claimed Applicants have amended claims 1 and 2 to claim "a queue for storing, as a job, a group of items of the information which specify a job and a document, the information including a job copy number count which designates a number of copies of the current job." Nothing in the cited prior art discloses a group of items of the information where the information specifically includes a job copy number count which designates a number of copies of the current job." Because *Sugiura et al.* fails to disclose each and

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every element of applicant's claimed invention, this claim is patentable over the cited

prior art. Applicants respectfully submit that they have successfully traversed this

rejection with regard to claim 1, and therefore request withdrawal of the rejection.

With regard to claims 3 and 4, *Sugiura et al.* fails to disclose output result control

means in a job scheduling device which controls the output result according to the

processing start/completion wait state of the jobs. Regarding claim 3, while many

elements of the claim are missing in *Sugiura et al.*, in particular *Sugiura et al.* fails to

disclose the prevention of the issuance of a processing request until the job in the

processing start wait state "is released from the processing start wait state by a user's

instruction or a timeout." Regarding claim 4, once again many aspects of the claim are

missing from *Sugiura et al.*, but particularly *Sugiura et al.* fails to disclose the issuance

of a processing request until the job in the processing completion wait state "is released

from the processing completion wait state by a user's instruction or a timeout."

The Examiner states that *Sugiura* teaches prevention of the issuance of

processing requests with respect to a document for that job (when the document is in

the BMM state, the program cannot request process of print, fig. 11B) and documents

for subsequent jobs until that job is released form a processing start wait state by a

timeout (the time is complete from S6 to S8, fig. 11B). But, the claim requires

prevention of the request until the job in the processing start wait state "is released from

the processing start wait state **by a user's instruction or a timeout**." Nothing in the

cited reference teaches this feature as claimed. The Examiner asserts that the

reference teaches a timeout period that the machine state changes from S6, S15 to S8.

However, not timeout feature is illustrated in steps S6, S15 to S8. As described in

columns 8 and 9, these steps are a wait for BMM acquirement and do not teach timeouts or any type of watchdog timer type features. Because *Sugiura et al.* fails to disclose each element of Applicants' claims 3 and 4, these claims are patentable over the prior art of record, and Applicants respectfully submit that they have successfully traversed this rejection and request withdrawal of the rejection.

Regarding claims 15 and 16, *Sugiura et al.* fails to disclose a job scheduling device as claimed. Although the Examiner has maintained that a scheduling means is disclosed in *Sugiura et al.* in column 8, lines 10-30, Applicants cannot find the disclosure of any such scheduling means within this part or any part of the application. The Examiner also asserts that in Figure 10, C shows that the print job received from host A is scheduled behind print job of page 5 received from host C, using a print control (Fig. 6). However, nothing in the cited reference discloses a "scheduling means for scheduling the jobs using the plurality of queues." Figure 10 merely pulls documents from a print queue according to the order that they were placed in a queue, not by any scheduling.

In particular, regarding claim 15, *Sugiura et al.* fails to disclose the recovery means of Applicants claimed invention. While the Examiner has stated that the recovery means of *Sugiura et al.* discloses a recovery means in that printing for host A requires A3 size paper with size A4 paper in the hopper, this does not disclose the recovery means of Applicants' invention. The Examiner states that column 8, lines 25 to 30 teaches to recover the printing for the print job received form host A from the previous state, using a print control (Fig. 6). But the recovery means of Applicants' invention, recovers the "previous state of **each of the jobs being held in the plurality**

of queues, at the time of recovery from a failure, **if any failure occurred while the jobs are being scheduled by said scheduling means.**" What the Examiner is citing is merely the resumption of printing following the addition of a new print request from a plurality of host devices. Because a true scheduling means is not present in *Sugiura*, it is not possible to find this limitation in the cited reference. In other words, *Sugiura* performs no scheduling, so there can be no failure occurring while jobs are being scheduled by the scheduling means.

In addition, regarding claim 16, *Sugiura et al.* fails to disclose the attribute modifying means of Applicants' claimed invention. The Examiner stated that column 10, lines 60-65 of *Sugiura et al.* corresponds to the attribute modifying means of Applicants' claim. However, this description only mentions a pattern setup for printing out in each logical printer. So, the attribute modifying means of claim 16 is not taught in this portion. The Examiner responds by stating that, in column 10, lines 20-32, *Sugiura* teaches to modify an attribute such as paper feed inlet or a paper discharged outlet using a print control. But, this portion of the cited reference only discloses assigning attribute information from a particular host device. It does not describe an attribute modifying means "for modifying attribute information only when a print job can be changed at the time that an instruction for modifying the attribute information of the print job is received." No modification of attribute information of any kind is taught in the cited reference. Therefore, Applicants respectfully submit that they have successfully traversed this rejection, and claims 15 and 16 are allowable over the prior art of record.

The Examiner rejected claim 6 under 35 U.S.C. § 102(b) as being anticipated by *Lobiondo*. *Lobiondo* is directed to a method of allocating print jobs to a plurality of

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printers through the network system. *Lobiondo* fails to disclose terminal equipment comprising "attribute information adding means for adding information relating to job weight control," or a job scheduling device comprising "control state setting means which, if wait control is set to the job information stored in said queue, renders a job associated with that job information in a wait control state when processing of that job is started or completed."

There is no disclosure in *Lobiondo* of weight control, as described and used in claim 6 of the present application. Claim 6 claims "control state setting means which, if wait control is set to the job information stored in said queue renders a job associated with that job information in a wait control state when processing of that job is started or completed." Wait control may include, for example, "a processing start wait, a processing completion wait, and a password input wait." (Page 55 of application.) In the portion of *Lobiondo* pointed to by the Examiner, specifically column 3, lines 50-63, Applicants can find no mention of wait control as used in Applicants' claim 6. Therefore, because *Lobiondo* fails to disclose each and every element of Applicants' claim 6, Applicants respectfully request the Examiner to allow claim 6.

The Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatenable over *Sugiura et al.* in view of *Rourke et al.* Neither reference discloses, teaches, or suggests, either alone or in combination, the amended element of "a queue for storing, as a job, a group of items of the information which specify a job and a document, the information including a job copy number count which designates a number of copies of the current job". In addition, neither reference discloses, teaches, or suggests, either alone or in combination an "output result control means . . . in such a way that a

specified number of copies of the job are only output in a collated manner if collation processing is specified . . . ." Because neither *Sugiura et al.* nor *Rourke et al.*, either alone or in combination, disclose each and every element of claim 2, Applicants respectfully request the Examiner to withdraw the rejection of claim 2 and allow this claim.

The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over *Sugiura et al.* in view of *Nezu*. However, neither *Sugiura et al.* nor *Nezu*, either alone or in combination, disclose, teach or suggest a job scheduling device as claimed. Specifically, neither reference addresses the Applicants' claimed limitation that "when a job is placed in the password input wait state, prevents the issue of processing requests with respect to a document of that job and documents of subsequent jobs until that job is released from the password input wait state by a user's instruction or a timeout. In addition regarding claim 5, Neither Suigiura nor Nezu discloses "control information setting means (of the terminal equipment) for specifying a password input wait for a leading document among the plurality of documents." In addition, neither Sugiura nor Nezu discloses "control information setting means (of the terminal equipment) for specifying a password input wait for a leading document among the plurality of documents." Because neither *Sugiura et al.* nor *Nezu*, either alone or in combination, disclose each and every element of Applicants' claimed invention, Applicants respectfully request the Examiner to allow claim 5.

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge

any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: December 24, 2002   By:_____

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APPENDIX

1. (Amended) A job processing system comprising a terminal equipment for issuing a job request by handling a plurality of documents as one job, and a job scheduling device which sequentially processes jobs by storing the jobs, received from the terminal equipment through a network, in a queue and sending a job execution section a processing request relating to a document specified by the job stored in the queue,

said terminal equipment comprising:

attribute information adding means for adding information which specifies a job output method to a job request as attribute information of the job, and

said job scheduling device comprising:

attribute information setting means for acquiring attribute information included in the received job and sets the attribute information to information which specifies a job and a document;

a queue for storing, as a job, a group of items of the information which specify a job and a document, the information including a job copy number count which specifies a number of copies of the current job; and

output result control means which, upon reference to the information items which specify a job and a document with respect to the job stored in the queue, controls the processing request issued to the job execution section in such a way that [a] the specified number of copies of the job are output using the information which specifies a job output method.

2. (Amended) A job processing system comprising a terminal equipment for issuing a job request by handling a plurality of documents as one job, and a job scheduling device which sequentially processes jobs by storing the jobs, received from the terminal equipment through a network, in a queue and sending a job execution section a processing request relating to a document specified by the job stored in the queue,

said terminal equipment comprising:

attribute information adding means for adding information relating to the number of copies of the job and information relating to a job output result to the job request as job attribute information, and

said job scheduling device comprising:

attribute information setting means for acquiring attribute information included in the received job and sets the attribute information to information which specifies a job and a document;

a queue for storing, as a job, a group of items of the information [for specifying a job and a document;] which specify a job and a document, the information including a job copy number count which specifies a number of copies of the current job; and

output result control means which, upon reference to the information for specifying a job and a document with respect to the job stored in the queue, controls the processing request issued to the job execution section in such a way that [a] the specified number of copies of the job are only output in a collated manner if collation processing is specified in the information relating to a job output result using the information which specifies a job and a document, or in such a way that [a] the specified

number of copies of the job are only output in an uncollated manner if uncollation

processing is specified in the information relating to the job output result using the

information which specifies a job and a document.